



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,476	08/09/2001	Atsushi Kikugawa	010983	2643

23850 7590 05/12/2003

ARMSTRONG, WESTERMAN & HATTORI, LLP  
1725 K STREET, NW  
SUITE 1000  
WASHINGTON, DC 20006

EXAMINER

OLTMANS, ANDREW L

ART UNIT

PAPER NUMBER

1742

DATE MAILED: 05/12/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/924,476	KIKUGAWA ET AL.
	Examiner	Art Unit
	Andrew L Oltmans	1742

The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

THE MAILING DATE OF THIS COMMUNICATION IS [REDACTED].

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 23 December 2002.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-6 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892) 4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 5)  Notice of Informal Patent Application (PTO-152)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6. 6)  Other: \_\_\_\_\_

## DETAILED ACTION

### *Translation*

1. The examiner has obtained a non-mechanical translation for the Nichiuchi et al reference. A copy of the translation has been attached to this Office Action for applicant's convenience.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

NOTE: All references to locations in the reference refer either to the English language abstract or the English language translation provided.

### *Nichiuchi et al. Japanese Patent JP 2000-150216 A*

3. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Nichiuchi et al. Japanese Patent JP 2000-150216 A (JP '216).

JP '216 teaches a permanent magnet comprising a rare earth metal-based permanent magnet (i.e. R-Fe-B) having a chemical film (i.e. a conversion coating) on the surface comprising phosphorus, oxygen, fluorine and at least one of titanium and zirconium, as recited in claims 1-2 and 5 (abstract; see also paragraph [0030]). JP '216 teaches that the magnet may be a Nd-Fe-B based permanent magnet, as recited in claim 6 (paragraph [0043]). JP '216 further teaches an embodiment wherein the thickness of the chemical film is from 0.01 - 1  $\mu\text{m}$ , which is

Art Unit: 1742

fully encompassed by the range of thickness recited in claim 4 (paragraph [0008]). JP '216 teaches that the chemical conversion film includes a rare earth metal and iron from the magnet surface, as recited in claim 1 and 3 (paragraph [0030]). JP '216 anticipates the claim 1 when component (a) is selected to be zirconium. The claims do not distinguish over the teachings of JP '216.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

NOTE: The following rejection under 35 USC 103 is applicable only to the members of the metal group defined as component (a) in claim 1 wherein the metal is molybdenum or tungsten.

***Nichiuchi et al. Japanese Patent JP 2000-150216 A***

5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nichiuchi et al. Japanese Patent JP 2000-150216 A (JP '216).

JP '216 teaches as set forth above in paragraph 5. JP '216 further teaches that it is desirable to add additional components to the chemical bath used to treat the magnet surface, including oxidizers, such as tungstic acid, its salts, molybdenum acid and its salts (paragraph [0026]).

Art Unit: 1742

JP '216 fails to meet all the limitations of the instant claims in that JP '216 does not explicitly teach that molybdenum or tungsten are included in the conversion coating, as recited in claim 1.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the process steps and treatment composition taught by the reference (i.e. treating the surface of the rare-earth metal-based permanent magnet with a molybdenum or vanadium compound) are the same as the process steps and treatment composition taught in the instant specification (specification, page 8, last line to page 11, line 11) and therefore one of ordinary skill in the art would expect that the products resulting from the process taught by the reference would be the same as the product resulting from applicant's claimed process, including the product's inclusion of molybdenum or tungsten in the conversion coating.

**"Where the claimed and prior art products are identical or substantially identical in structure or composition or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best 195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01. [emphasis added by examiner]**

#### *Response to Arguments*

6. Applicant's arguments filed March 10, 2003 have been fully considered but they are not persuasive. Claims 1-6 remain pending in this application. The rejections made in the previous Office Action under 35 USC 102 and 103 have been maintained.

7. Applicant's arguments are all drawn to the proposition that the examiner is incorrectly interpreting paragraph [0030] of the JP '216 reference. The examiner maintains the position put

forth in paragraph 7 of the previous Office Action, namely that “JP ‘216 teaches that the chemical conversion film includes a rare earth metal and iron from the magnet surface, as recited in claim 1 and 3 (paragraph [0030])” (paragraph 7 of the previous Office Action). The non-mechanical translation further explains that “[f]urther, during chemical conversion, the phosphoric acid, compound phosphoric acid, and the like in the treatment solution *react with the materials of the magnet in the form of Nd and Fe* on the surface of the magnet forming a passive film” (paragraph [0030] of the non-mechanical translation-emphasis added). Paragraph [0030] unambiguously teaches that the passive conversion coating film contains the Nd and Fe *from the magnet*. Therefore the examiner maintains that claims 1-6 are anticipated and obvious over JP ‘216 as applied in the previous Office Action..

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Oltmans whose telephone number is 703-308-2594. The examiner can normally be reached 8:30-5:00 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-873-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*ALO*  
ALO

May 6, 2003

*John P. Sheehan*  
John P. Sheehan  
Primary Examiner  
Art Unit 1742